



Panasonic

Cordless Phone

Model No. KX-TC280-B

Pulse-or-tone dialing capability

Operating Instructions



2 LINE

PLEASE READ BEFORE USE AND SAVE.

Charge the battery for about 10 hours before initial use.

Preparation

Basic Operation

Advanced Operation

Useful Information

Before Initial Use

Please read **IMPORTANT SAFETY INSTRUCTIONS** on pages 32–33 before use. Read and understand all instructions.

Thank you for purchasing the Panasonic cordless telephone.

Attach your purchase receipt here.

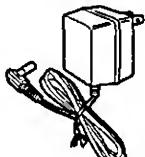
For your future reference

Serial No. _____ Date of purchase _____
(found on the bottom of the unit)

Name and address of dealer _____

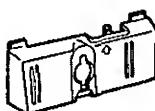
Accessories

AC Adaptor (p. 8)



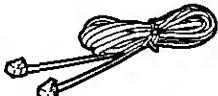
one

Wall Mounting Adaptor (p. 29)



one

4-Wired Telephone Line Cord with Green Plugs (p. 9, 10)



one

2-Wired Telephone Line Cord with Transparent Plugs (p. 10)



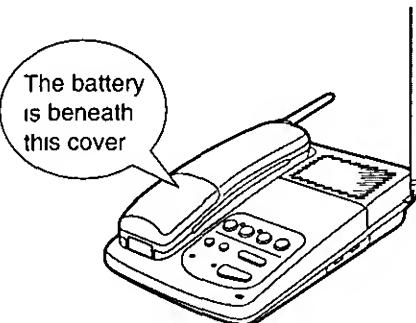
one

- To order accessories, call 1-800-332-5368.

For Best Performance

Battery Charge

To power the handset, charge the battery for about **10 hours** before initial use (p. 11)

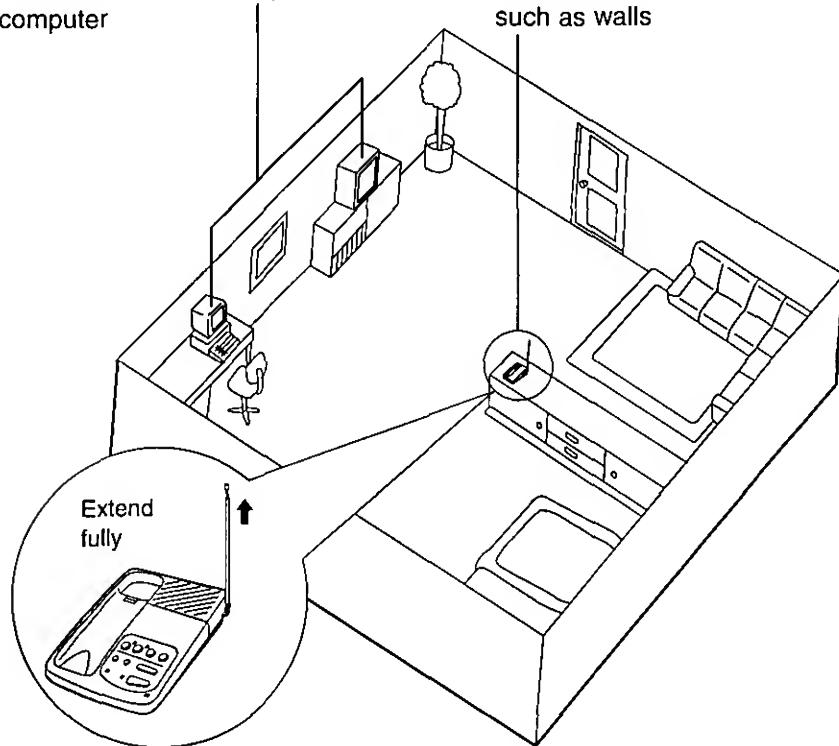


Operating Distance/Noise

Calls are transmitted between the base unit and the handset using wireless radio waves. **For maximum distance and noise free operation**, the recommended base unit location is

Away from electrical appliances such as a TV, radio, or personal computer

In a HIGH and CENTRAL location with no obstructions such as walls



Contents

Preparation

Location of Controls	6
Setting Up	8
Connecting the AC Adaptor	8
Connecting the Telephone Line Cord	9
Battery Charge	11

Basic Operation

Making Calls	12
Answering Calls	14
With the Base Unit (Speakerphone)	14
With the Handset	15
Using the Other Line During a Conversation	16
Automatic Dialing	18
Storing Phone Numbers in Memory	18
Dialing a Stored Number	19

Advanced Operation

Conference	20
Intercom	22
Transferring Calls Using the Intercom	23
Special Features	24
Automatic Security Code Setting	24
For Call Waiting Service Users	24
Temporary Tone Dialing (For Rotary Service Users)	24
If Your Unit is Connected to a PBX	24

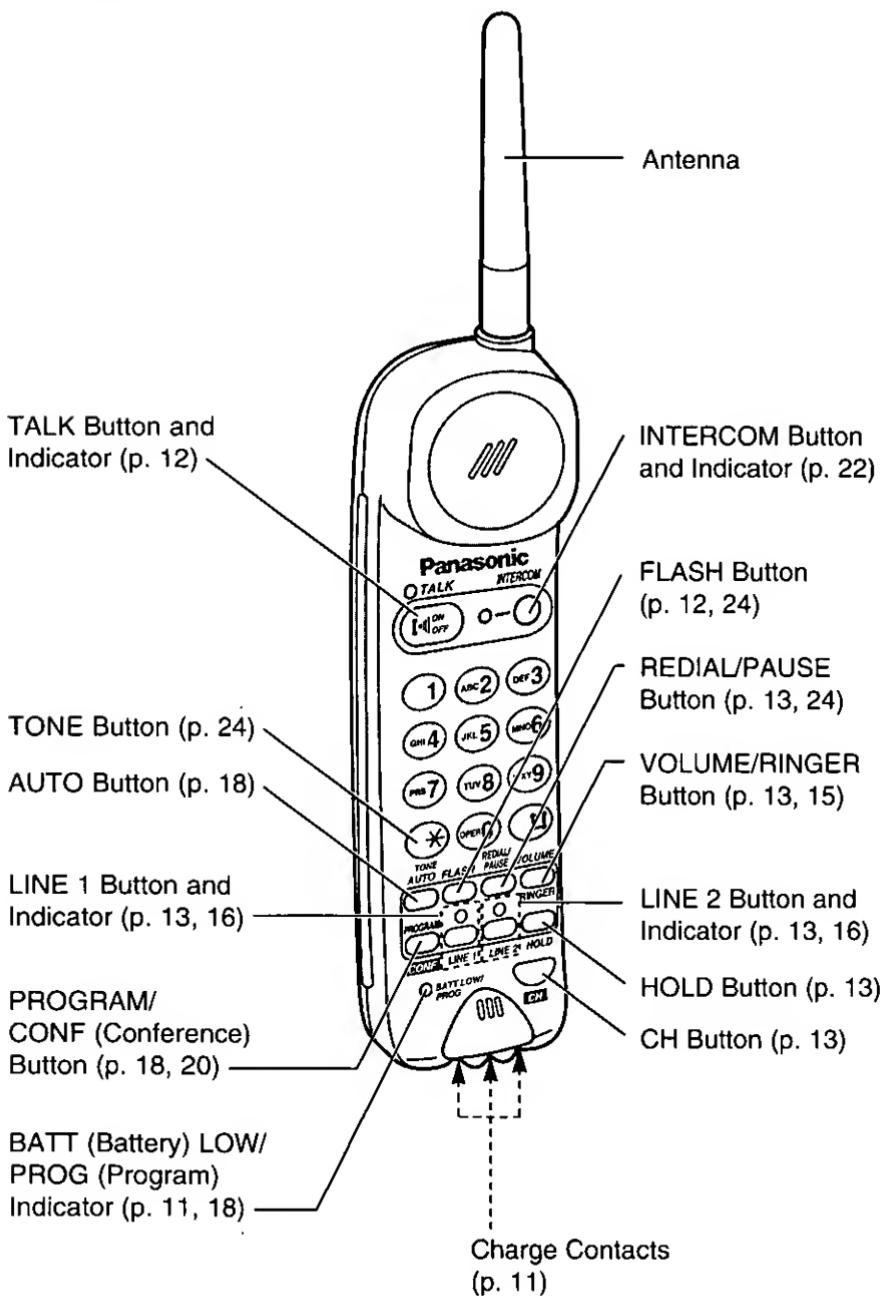
Programmable Functions	.....	25
Line Selection Programming	.....	25
Line Indicator Programming	.....	26
Incoming Call Tone Programming	.....	26
Line Mode Selection	.....	27
Adding Another Phone	.....	27

<i>Useful Information</i>

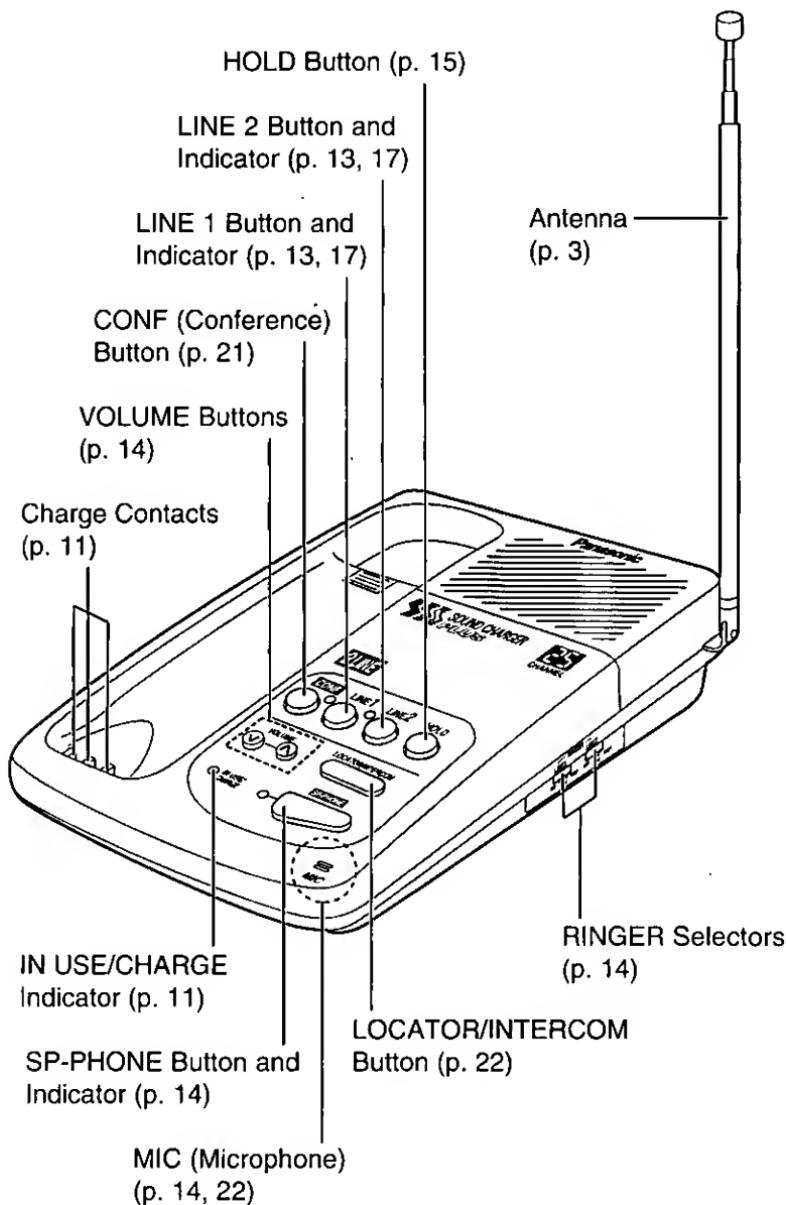
Battery Replacement	.....	28
Wall Mounting	.....	29
Before Requesting Help	.....	30
Important Safety Instructions	.....	32
FCC and Other Information	.....	34

Location of Controls

Handset

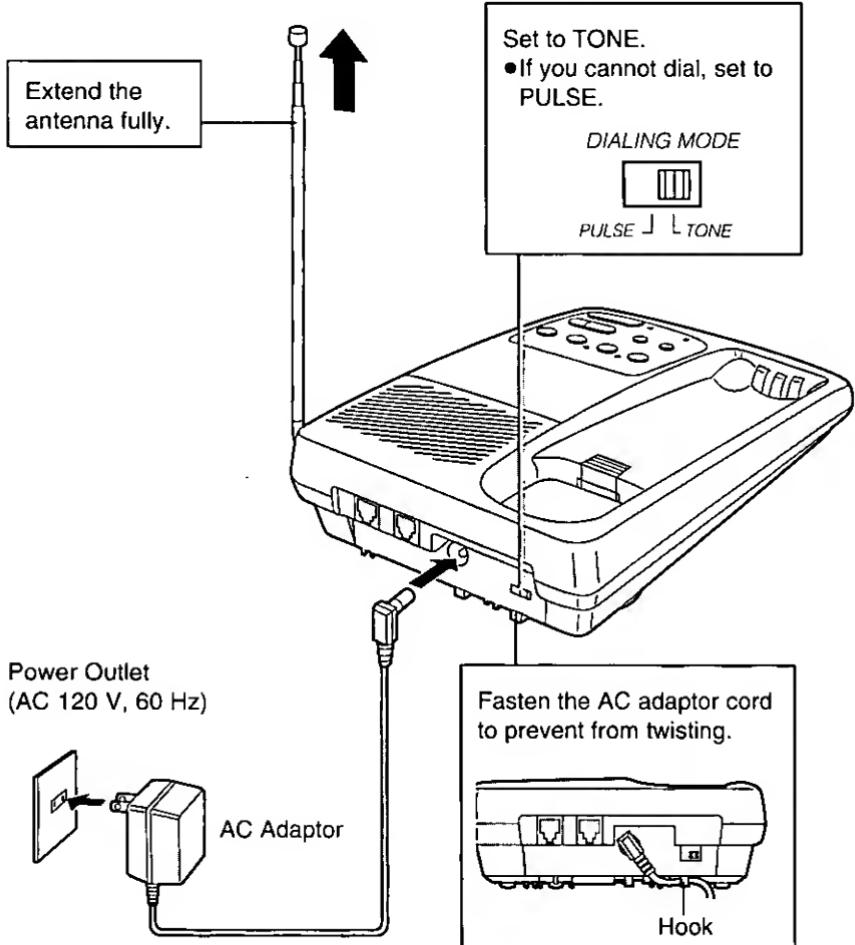


Base unit



Setting Up

Connecting the AC Adaptor

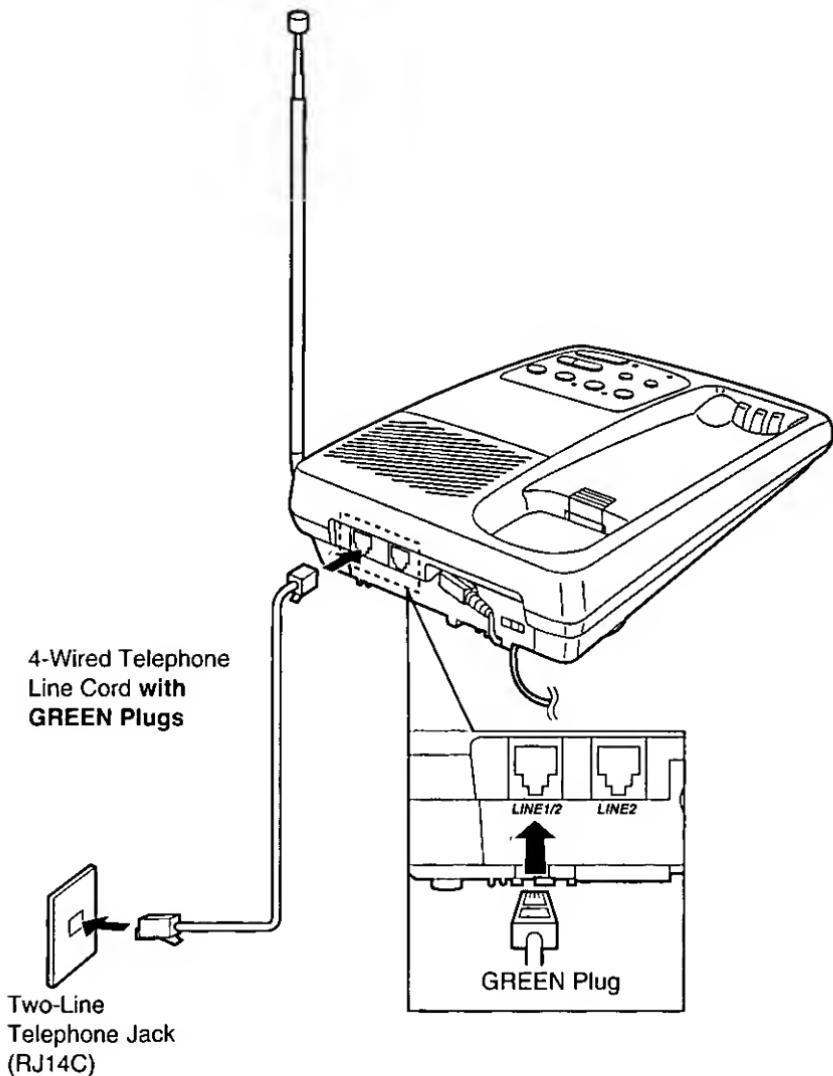


- USE ONLY Panasonic AC ADAPTOR KX-A09.
- The AC adaptor must remain connected at all times. (It may feel warm during use. This is normal.)
- If you connect a reserve telephone on the same line, see page 27.

Connecting the Telephone Line Cord

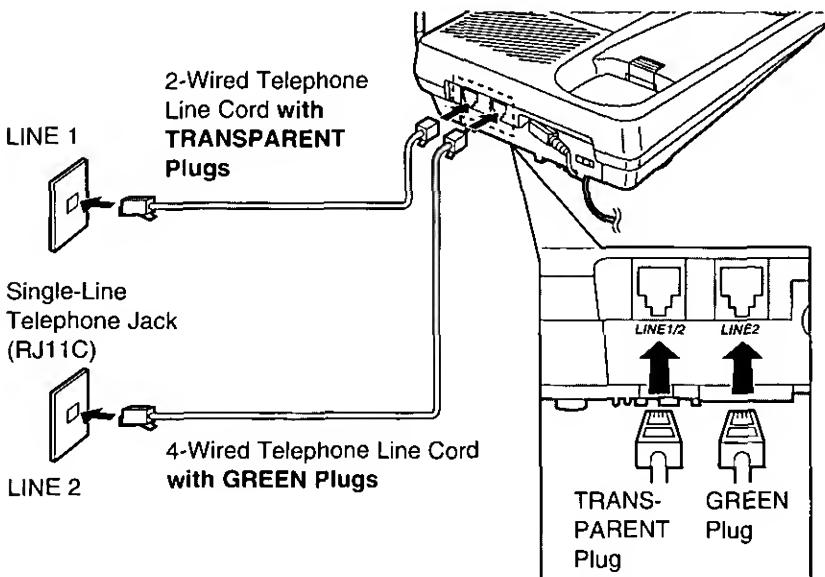
Connect the telephone line cord(s) to the unit as follows.

To connect a two-line telephone jack

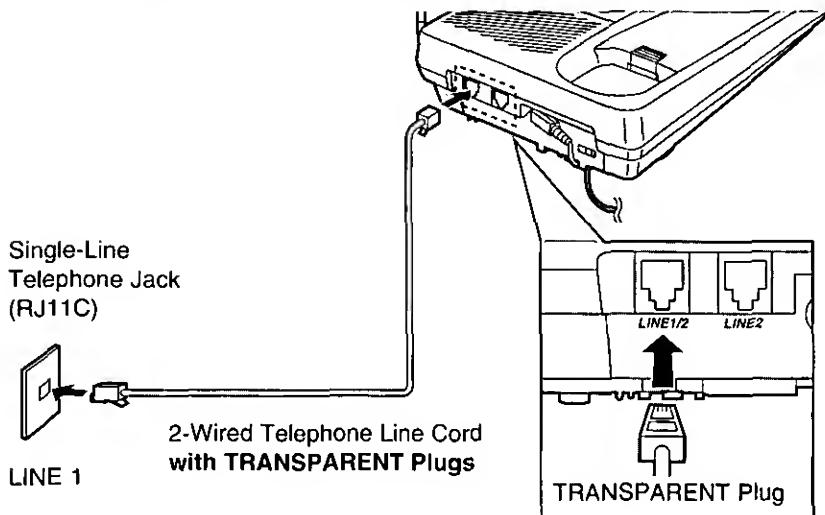


▶ Setting Up

To connect two single-line telephone jacks



If you use the unit as a single-line telephone only

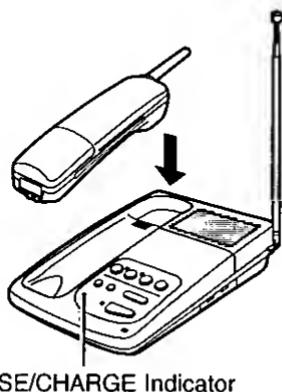


- With this connection, you can only use LINE 1. The LINE 2 indicator will not work properly. (It will continue to flash.) For correct line indication, see page 26.

Battery Charge

Place the handset on the base unit for about **10 hours**.

- The IN USE/CHARGE indicator lights.



IN USE/CHARGE Indicator

Recharge

When the BATT LOW/PROG indicator flashes or the unit beeps intermittently, recharge the battery.



BATT LOW/PROG
Indicator

Standard battery life

If your Panasonic battery is fully charged;

While in use (TALK)	Up to about 8 hours
While not in use (Stand-By)	Up to about 21 days

- Battery life may vary depending on usage conditions and ambient temperature.
- Clean the handset and the base unit charge contacts with a soft dry cloth once a month, or the battery may not charge properly.
- Once the battery is fully charged, you do not have to place the handset on the base unit until the BATT LOW/PROG indicator flashes.
- The battery cannot be overcharged.

Making Calls

The unit will automatically select a free line which is not being used by a parallel connected telephone when you press **TALK** to make a call
(To change the line selection, see page 25)

1 Press **TALK**

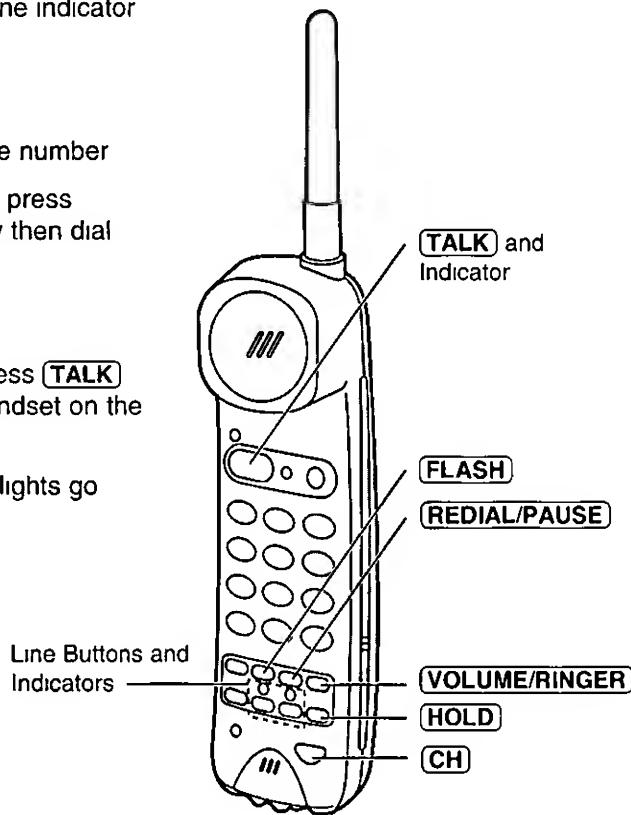
- The TALK indicator and the selected line indicator light

2 Dial a telephone number

- If you misdial, press **FLASH** firmly then dial again

3 To hang up, press **TALK** or place the handset on the base unit

- The indicator lights go out



- If an alarm tone sounds in step 1, move toward the base unit or place the handset on the base unit. Then try again
- In step 1, you may select a line manually by directly pressing the line button instead of **TALK**

To redial the last number

Press **TALK** (or a line button) \blacktriangleright **REDIAL/PAUSE**

To select the receiver volume HIGH or NORMAL (preset)

Press **VOLUME/RINGER** while speaking

- Each time you press, the volume level will change

If noise interferes with the conversation

Press **CH** to select a clear channel or move closer to the base unit

To put a call on hold

Press **HOLD**. The TALK indicator light goes out and the line indicator flashes.

- If you put a call on hold for 6 minutes, a warning tone will sound.
The call will be disconnected after a total of 10 minutes
- To release the hold, press the line button

You may make or answer a second call on the other line while keeping the present call on hold. See page 16

What the line indicator means

Light off	The line is free
Light on	The line is being used by the handset or the base unit
Flashing two times every 2 seconds	The line is being used by a parallel connected telephone
Flashing	The call is on hold
Flashing quickly	Receiving a call on the line (p. 14)

Answering Calls

When a call is being received, the called line indicator flashes quickly. The line is automatically selected when you answer it.

With the Base Unit (Speakerphone)

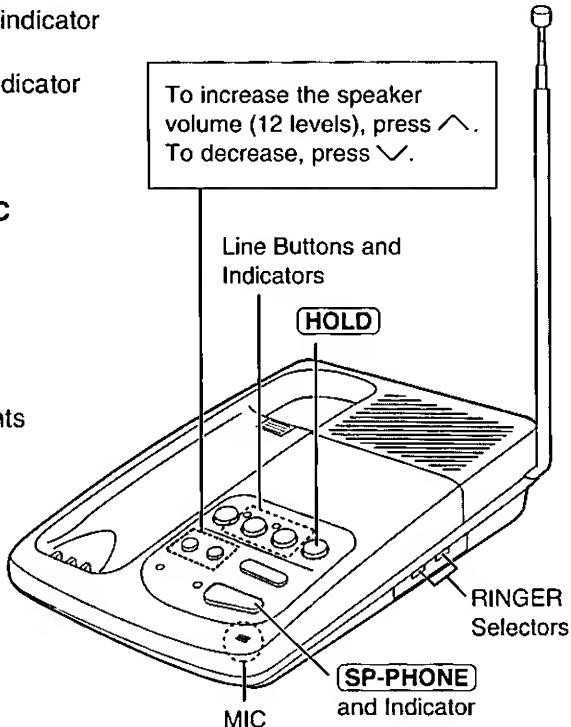
1 Press **SP-PHONE**.

- The SP-PHONE indicator lights.
- The called line indicator lights.

2 Speak into the MIC (microphone).

3 To hang up, press **SP-PHONE**.

- The indicator lights go out.



To select the ringer volume

Set the RINGER selector of each line to HIGH, LOW, or OFF.

- When set to OFF, the bell will not ring on the line.

During the speakerphone operation:

- For best performance, speak alternately with the caller in a quiet room. If the other party has difficulty hearing you, press \vee to decrease the speaker volume.
- If the handset is on the base unit, you may switch to it by lifting up.
- The line indicator shows the state of the line (p. 13).

To put a call on hold

Press **(HOLD)**. The SP-PHONE indicator light goes out and the line indicator flashes.

- If you put a call on hold for 6 minutes, a warning tone will sound.
The call will be disconnected after a total of 10 minutes.
- To release the hold, press the line button.

You may answer a second call on the other line while keeping the present call on hold. See page 17.

With the Handset

If the handset is off the base unit, press **(TALK)**.

- The called line indicator lights.
- You can also answer a call by pressing any dialing button 0 to 9, *, or # (—Any Key Talk).



OR

If on the base unit, just lift it.

- The called line indicator lights.



Adjusting the ringer volume

Be sure the TALK and/or INTERCOM indicator light is off.

- To select HIGH (preset) or LOW, press **(VOLUME/RINGER)**.
(Each time you press, the ringer volume will change.)
- To turn the ringer OFF, while pressing **(VOLUME/RINGER)**, press **0** until 2 beeps sound.
- To turn the ringer ON, press **(VOLUME/RINGER)**. The ringer sounds at the HIGH level.

Using the Other Line During a Conversation

During a conversation, if **two tones** sound and the other line indicator flashes quickly, an incoming call is being received on the line. You can answer the second call while keeping the first call. With the handset you can also make a call without terminating the first call.

You may eliminate the **two tones** (incoming call tone) by programming. See page 26.

With the handset

1 Example: If you are using LINE 1

Press **HOLD** to put the first call (LINE 1) on hold.

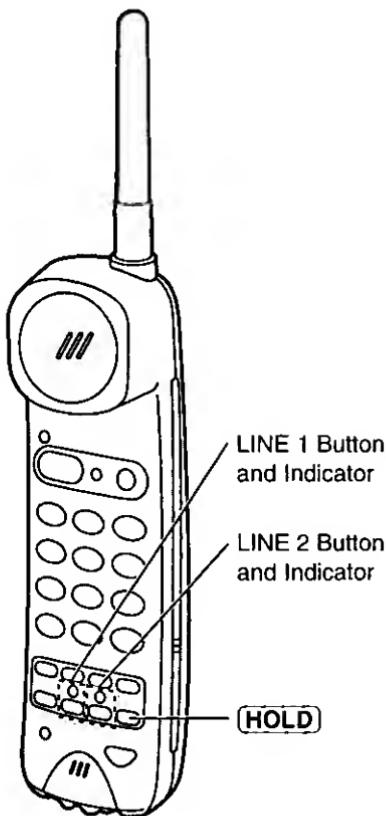
- The LINE 1 indicator flashes.

2 Press the other line button (LINE 2) to make or answer a second call.

- The LINE 2 indicator lights.

3 To return to the first call (LINE 1), press the line button of the first call (LINE 1).

- The second call is terminated.



- To keep the second call in step 3, press **HOLD** before pressing the line button of the first call.

With the base unit

- 1 Example: If you are using LINE 1
Press **HOLD** to put the first call
(LINE 1) on hold.

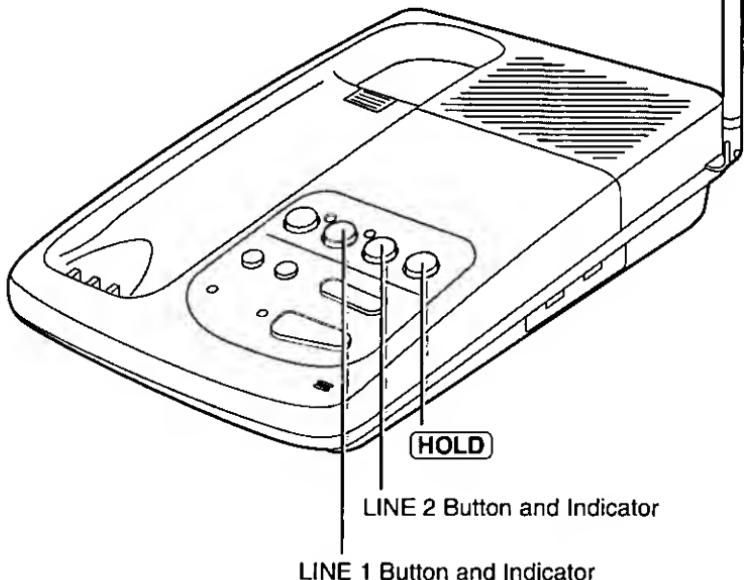
- The LINE 1 indicator flashes.

- 2 Press the other line button (LINE 2)
to answer the second call.

- The LINE 2 indicator lights.

- 3 To return to the first call (LINE 1),
press the line button of the first call
(LINE 1).

- The second call is terminated.



- To keep the second call in step 3, press **HOLD** before pressing the line button of the first call.

Automatic Dialing

Storing Phone Numbers in Memory

You can store up to 10 numbers in the handset. The dialing buttons (0 to 9) function as memory stations. The TALK indicator light must be off.

1 Press **[PROGRAM/CONF]**

- The BATT LOW/PROG indicator lights

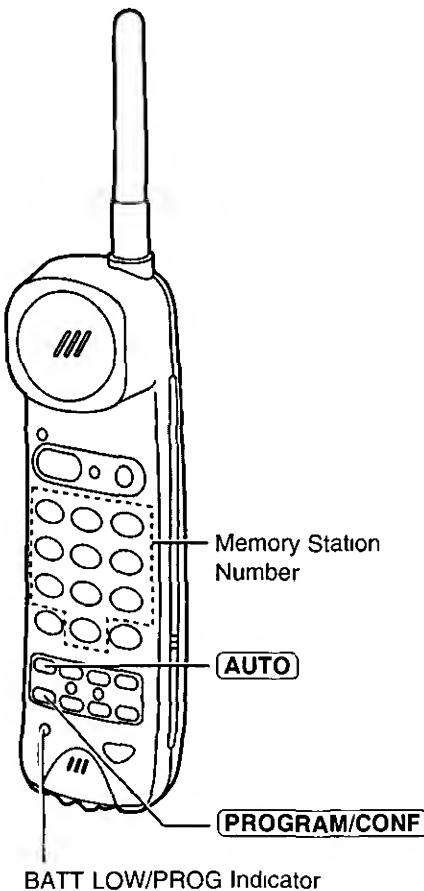
2 Enter a phone number up to 16 digits

- If you misdial, press **[PROGRAM/CONF]** to end storing, then restart from step 1

3 Press **[AUTO]**

4 Press a memory station number (0 to 9)

- A confirmation tone sounds (See below)
- To store other numbers, repeat steps 1 through 4



What the confirmation tone means

1 beep The new number is stored

2 beeps The number is the same as a previously stored one

To erase a stored number

Press [PROGRAM/CONF] ➡ [AUTO] ➡ the memory station number (for the phone number to be erased.)

Memory sticker

Use the included memory sticker as a name or phone number index for automatic dialing. Attach the sticker to the unit or in a convenient place.

10-STATION AUTOMATIC DIALER	
1	6
2	7
3	8
4	9
5	0
LINE 1	LINE 2

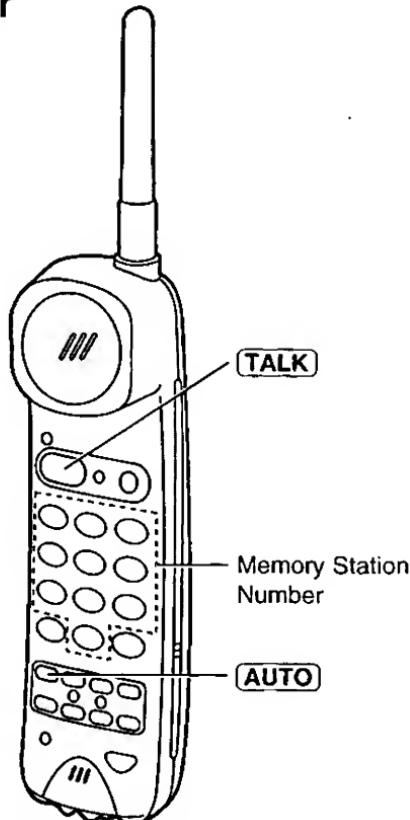
Dialing a Stored Number

1 Press [TALK].

2 Press [AUTO].

3 Press the memory station number (0 to 9).

- The stored number is dialed.



Conference

While having a conversation on one line, you can make or answer a second call on the other line and then combine both lines together to establish a conference call.

With the handset

1 Example: If you are using LINE 1

Press **(HOLD)** to put the first call (LINE 1) on hold.

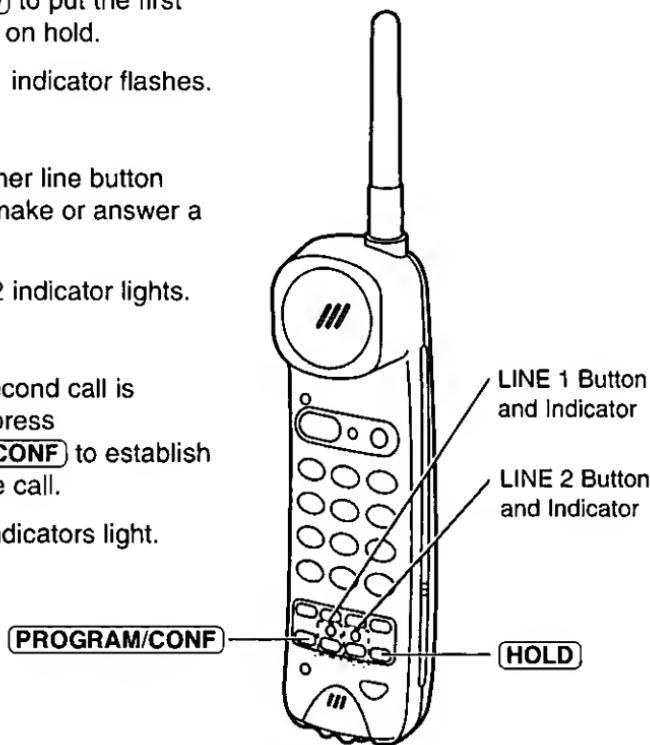
- The LINE 1 indicator flashes.

2 Press the other line button (LINE 2) to make or answer a second call.

- The LINE 2 indicator lights.

3 When the second call is connected, press **(PROGRAM/CONF)** to establish a conference call.

- Both line indicators light.



During a conference call:

- To hang up both lines, press **(TALK)**.
- To hang up only one line, press the line button you want to continue.
- To put both lines on hold, press **(HOLD)**.
To talk with only one caller, press the corresponding line button.
To resume both lines, press **(PROGRAM/CONF)**.
- The base unit user can join a conference call on the handset by pressing **(SP-PHONE)**.

With the base unit

1 Example: If you are using LINE 1

Press **(HOLD)** to put the first call
(LINE 1) on hold.

- The LINE 1 indicator flashes.

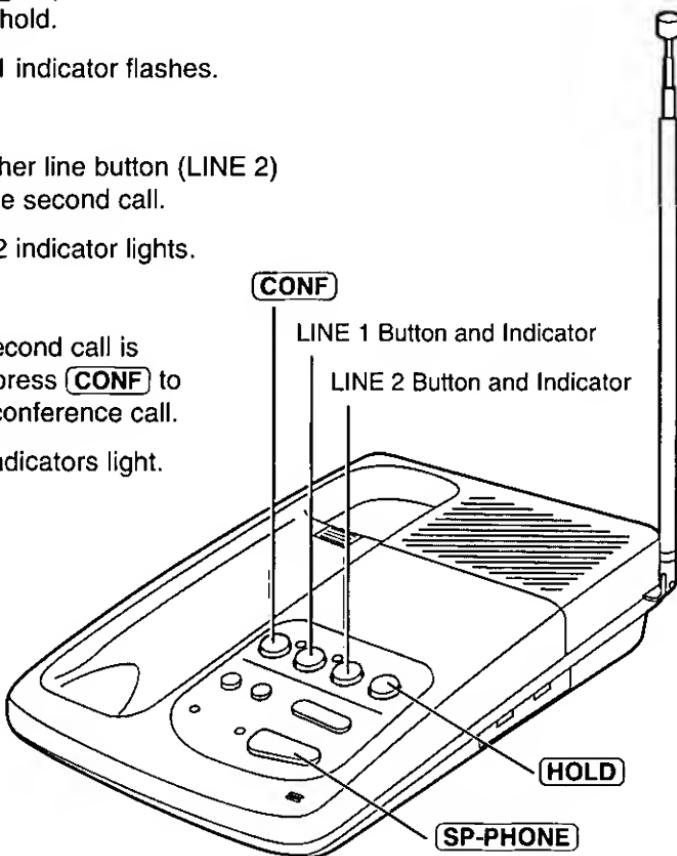
2 Press the other line button (LINE 2)

to answer the second call.

- The LINE 2 indicator lights.

3 When the second call is connected, press **(CONF)** to establish a conference call.

- Both line indicators light.



During a conference call:

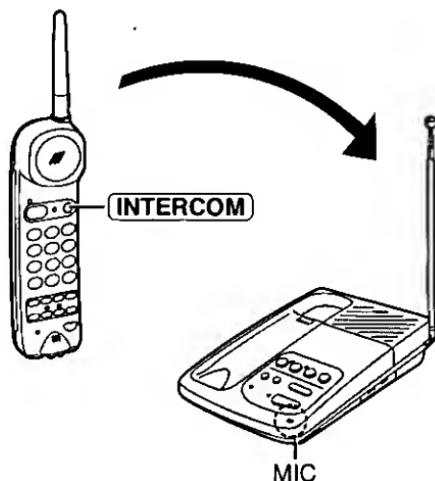
- To hang up both lines, press **(SP-PHONE)**.
- To hang up only one line, press the line button you want to continue.
- To put both lines on hold, press **(HOLD)**.
To talk with only one caller, press the corresponding line button.
To resume both lines, press **(CONF)**.
- The handset user can join a conference call on the base unit by pressing **(TALK)**.

Intercom

A 2-way intercom is available between the handset and the base unit. Intercom calls can only be ended by the handset.

Paging the base unit from the handset

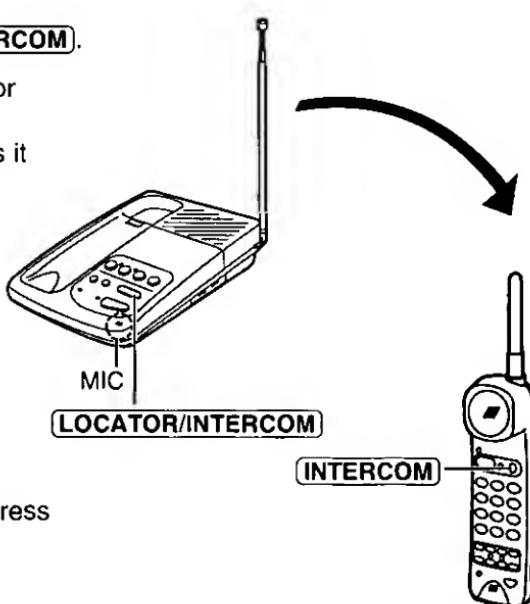
- 1 Handset:**
Press **[INTERCOM]**, then speak.
- 2 Base unit:**
When the other party's voice is heard, answer through the **MIC**.
- 3 Handset:**
To end the intercom, press **[INTERCOM]**.



Paging the handset from the base unit (Handset locator)

Using this feature, you can locate the handset if misplaced.

- 1 Base unit:**
Press **[LOCATOR/INTERCOM]**.
 - The handset beeps for 1 minute.
 - To stop paging, press it again.
- 2 Handset:**
Press **[INTERCOM]** to answer.
- 3 Base unit:**
Speak into the **MIC**.
- 4 Handset:**
To end the intercom, press **[INTERCOM]**.



During the intercom:

- If the handset user has difficulty hearing the base unit user, decrease the speaker volume by pressing \swarrow .
- If two tones sound, an incoming call has been received. To answer, press the line button whose indicator is flashing. The intercom is ended.

Transferring Calls Using the Intercom

The intercom can be used during a call. This feature enables you to transfer the call between the handset and the base unit.

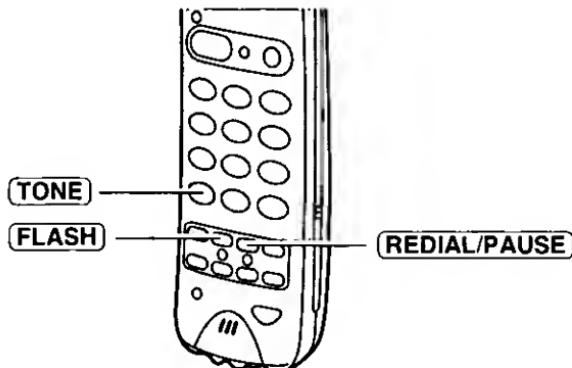
From the handset to the base unit

- 1 Handset:
During a call, press **[INTERCOM]** then speak.
 - The call is put on hold.
- 2 Base unit:
When the paging party's voice is heard, answer through the **MIC**.
- 3 Base unit:
To answer the call, press the line button whose indicator is flashing.
 - The transfer is completed.
 - The handset user can join the conversation by pressing the line button whose indicator light is on.

From the base unit to the handset

- 1 Base unit:
During a call, press **[LOCATOR/INTERCOM]**.
 - The call is put on hold.
- 2 Handset:
Press **[INTERCOM]** to answer the page.
- 3 Handset:
To answer the call, press the line button whose indicator is flashing.
 - The transfer is completed.
 - The base unit user can join the conversation by pressing the line button whose indicator light is on.

Special Features



Automatic Security Code Setting

Whenever you place the handset on the base unit, the unit automatically selects one of 65,000 security codes. These codes help to avoid unauthorized use of your telephone line by another cordless telephone.

For Call Waiting Service Users

Press **FLASH** lightly if you hear a call-waiting tone while speaking.

- The first call is put on hold and you can answer the second call.
- To return to the first caller, press **FLASH** again.

Temporary Tone Dialing (For Rotary Service Users)

Press **TONE** before entering access numbers which require tone dialing.

- The dialing mode changes to tone. You can enter numbers to access answering systems, electronic banking services, etc. When you hang up, the mode returns to pulse.

If Your Unit is Connected to a PBX

We recommend you press **REDIAL/PAUSE** between the access number for an outside line and the phone number.

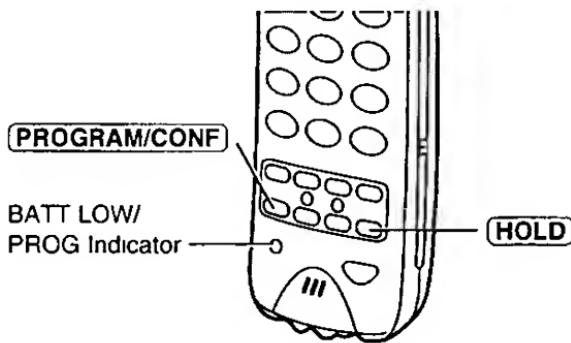
- Pressing **REDIAL/PAUSE** once creates a 3.5 second pause. This prevents misdialing when you redial or dial a stored number. (**REDIAL/PAUSE** counts as one digit.)

Programmable Functions



You can program the following functions by using the handset near the base unit. Be sure that the TALK indicator light is off.

- If an alarm tone sounds when you press [HOLD], move toward the base unit, then try again.



Line Selection Programming

The unit will automatically select a free line which is not being used by a parallel connected telephone when you make a call. Also the unit will select the called line when you answer the call.

To change the line selection, program as follows:

- 1 Press [PROGRAM/CONF] to start programming
 - The BATT LOW/PROG indicator lights
 - 2 Press [HOLD]
 - 3 Press [1]
 - 4 Press [1], [2], or [3] to select the desired line selection
 - 1. Line 1 will be selected first
 - 2. Line 2 will be selected first
 - 3. A free line will be selected (Line 1 has priority) when making a call. The called line is automatically selected when answering a call
 - 5 When finished, press [PROGRAM/CONF]
 - The BATT LOW/PROG indicator light goes out
- Any line can be selected manually in any mode (1 to 3) by pressing the line button directly.

Line Indicator Programming

Both of the line indicators are preset to ON If a line is not connected, the line's indicator will continue to flash To turn off the indicator, program as follows

- 1 Press **PROGRAM/CONF** to start programming
 - The BATT LOW/PROG indicator lights
- 2 Press **HOLD**
- 3 Press **2**
- 4 Press **1** (Line 1) or **2** (Line 2) to select the line indicator
- 5 Press **2** (OFF) to deactivate the indicator
 - To activate the line indicator again, press **1** (ON)
- 6 When finished, press **PROGRAM/CONF**
 - The BATT LOW/PROG indicator light goes out

Incoming Call Tone Programming

When a line is being used and another call arrives on the other line, the unit will indicate this by a series of two tones This incoming call tone can be eliminated/set by programming

- 1 Press **PROGRAM/CONF** to start programming
 - The BATT LOW/PROG indicator flashes
 - 2 Press **HOLD**
 - 3 Press **3**
 - 4 Press **1**, **2**, or **3**
 - 1 Incoming call tone will sound as long as the other line rings
 - 2 Incoming call tone will sound only 2 times
 - 3: Incoming call tone will not sound
 - 5 When finished, press **PROGRAM/CONF**
 - The BATT LOW/PROG indicator light goes out
- When the RINGER selector(s) is set to OFF, the incoming call tone will not sound on the base unit
 - The two tones which sound when a call is received during an intercom cannot be removed by programming

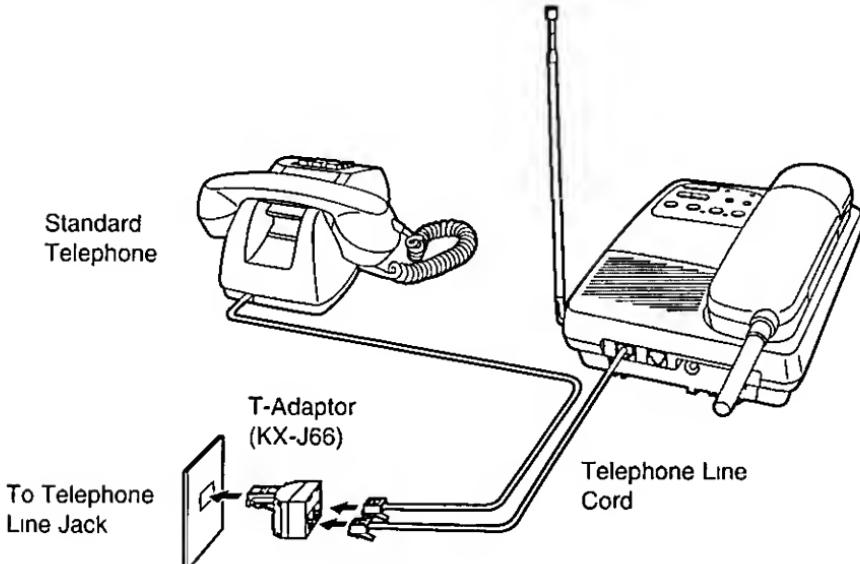
Line Mode Selection

If the line is connected to a low voltage system such as a PBX, set to B for proper operation of the line indicator. Factory preset is A.

- 1 Press **PROGRAM/CONF** to start programming
 - The BATT LOW/PROG indicator lights
- 2 Press **HOLD**
- 3 Press **4**
- 4 Press **1** (Line 1) or **2** (Line 2) to select the line indicator
- 5 Press **2** to set to B
 - To set to A, press **1**
- 6 When finished, press **PROGRAM/CONF**
 - The BATT LOW/PROG indicator light goes out

Adding Another Phone

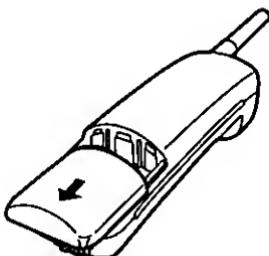
This unit will not function during a power failure. To connect a standard telephone on the same line, use a Panasonic T-adaptor KX-J66. (To order, call 1-800-332-5368.)



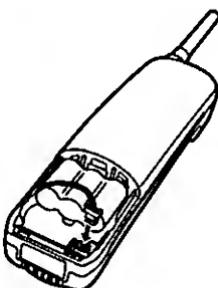
Battery Replacement

If the BATT LOW/PROG indicator flashes after being fully charged, replace with a new Panasonic KX-A36A battery. (To order, call 1-800-332-5368.) To prevent memory loss, replace within 5 minutes.

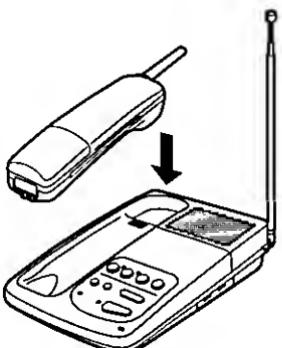
- 1 Remove the cover.



- 2 Replace the battery, then close the cover.



- 3 Charge the new battery for about 10 hours.



Attention:

The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

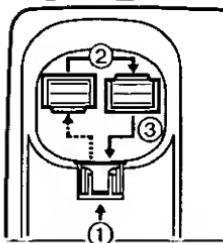


Wall Mounting

This unit can be mounted on a wall phone plate.

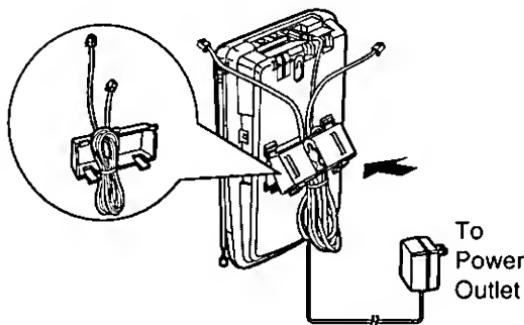
Be sure to reverse the handset hook in the cradle so the tab holds the handset.

- ① Push to remove.
- ② Rotate 180°.
- ③ Replace it with the tab facing upwards.



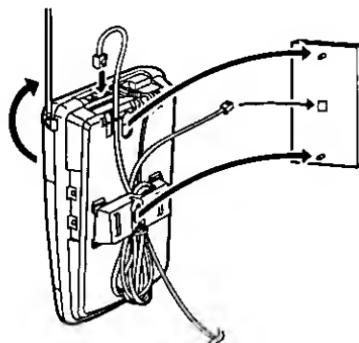
- 1** Connect the AC adaptor. Tuck the telephone line cord inside the wall mounting adaptor, then push it in the direction of the arrow.

- The word "UP" should face upward.



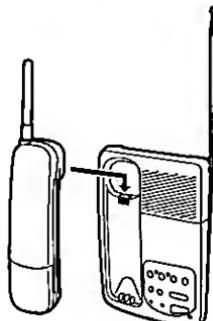
- 2** Connect the telephone line cord. Mount the unit, then slide down.

- Extend the antenna fully.



- 3 To charge the battery:**
Place the handset on the handset hook as shown.

- The IN USE/CHARGE indicator lights.



Before Requesting Help

Problem	Remedy
An alarm tone sounds when you press TALK , LINE 1 , LINE 2 , INTERCOM or HOLD on the handset.	<ul style="list-style-type: none">• You are too far from the base unit. Move closer and try again.• Place the handset on the base unit and try again.• Plug in the AC adaptor.• Clean the charge contacts and charge again.
The unit does not work.	<ul style="list-style-type: none">• Check the setting (p. 8-11).• Charge the battery fully.• Clean the charge contacts and charge again.
Static, sound cuts in/out, fades. Interference from other electrical units.	<ul style="list-style-type: none">• Set the handset and the base unit away from electrical appliances.• Move closer to the base unit.• Extend the base unit antenna fully.• Press CH to change the channel.
The handset does not ring.	<ul style="list-style-type: none">• The ringer volume is OFF. Press VOLUME/RINGER when the TALK indicator light is off.
The base unit does not ring.	<ul style="list-style-type: none">• The RINGER selectors are set to OFF. Set to HIGH or LOW.
REDIAL/PAUSE does not function properly.	<ul style="list-style-type: none">• The button has a double function. It will redial the last dialed number if pressed at the outset of a call (p. 13). If another number has been dialed first, it will operate as a pause button (p. 24).
You cannot store a phone number in memory.	<ul style="list-style-type: none">• You cannot store a number while the unit is in the talk, speakerphone or intercom mode.• Do not pause for over 30 seconds while storing.
While storing a phone number, the unit starts to ring.	<ul style="list-style-type: none">• To answer the call, press TALK or SP-PHONE. The program will be canceled; store the number again.

Problem	Remedy
The line indicators do not work properly.	<ul style="list-style-type: none"> Check the connection (p. 8-10). See page 26 for proper operation of line indicators. The line mode selection is improper. See page 27.
I cannot make or answer a call with the handset (or base unit).	<ul style="list-style-type: none"> The base unit (or handset) user has a call on one line. Wait until the line indicator light goes out.
During an outside call, two tones sound and the other line indicator flashes quickly.	<ul style="list-style-type: none"> Someone is calling you on the other line. To answer, press HOLD to put the current call on hold, then press the line button whose indicator is flashing quickly. See pages 16, 17.
LOCATOR/INTERCOM does not function.	<ul style="list-style-type: none"> The handset is too far from the base unit or is engaged in an outside call.
During an intercom call, two tones sound.	<ul style="list-style-type: none"> A call is being received. To answer, press the line button whose indicator is flashing.
The BATT LOW/PROG indicator flashes or the unit beeps intermittently.	<ul style="list-style-type: none"> Charge the battery fully (p. 11).
You charged the battery fully, but the BATT LOW/PROG indicator flashes.	<ul style="list-style-type: none"> Clean the charge contacts and charge again. Install a new battery (p. 28).
The IN USE/CHARGE indicator light never goes out while charging.	<ul style="list-style-type: none"> This is normal.
The unit stops working during operation.	<ul style="list-style-type: none"> Place the handset on the base unit and unplug the AC adaptor to reset. Plug in, then try again.
If you cannot solve your problem.	<ul style="list-style-type: none"> Call our customer satisfaction center at 201-348-9090.

Important Safety Instructions

When using this unit, basic safety precautions should always be followed to reduce the risk of fire, electric shock, or personal injury.

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from AC outlets before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit near water, for example, near a bath tub, wash bowl, kitchen sink, or the like.
5. Place this unit securely on a stable surface. Serious damage and/or injury may result if the unit falls.
6. Do not cover slots and openings on the unit. They are provided for ventilation and protection against overheating. Never place the unit near radiators, or in a place where proper ventilation is not provided.
7. Use only the power source marked on the unit. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
8. Do not place objects on the power cord. Install the unit where no one can step or trip on the cord.
9. Do not overload wall outlets and extension cords. This can result in the risk of fire or electric shock.
10. Never push any objects through slots in this unit. This may result in the risk of fire or electric shock. Never spill any liquid on the unit.
11. To reduce the risk of electric shock, do not disassemble this unit. Take the unit to an authorized servicenter when service is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the unit is subsequently used.
12. Unplug this unit from the wall outlet and refer servicing to an authorized servicenter when the following conditions occur:
 - A. When the power supply cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the unit.
 - C. If the unit has been exposed to rain or water.
 - D. If the unit does not work normally by following the operating instructions. Adjust only controls covered by the operating instructions. Improper adjustment may require extensive work by an authorized servicenter.
 - E. If the unit has been dropped or physically damaged.
 - F. If the unit exhibits a distinct change in performance.

-
13. During thunderstorms, avoid using telephones except cordless types. There may be a remote risk of an electric shock from lightning.
 14. Do not use this unit to report a gas leak, when in the vicinity of the leak.
 5. Charge the battery(ies) provided with or identified for use with this product only in accordance with the instructions and limitations specified in this manual.

SAVE THESE INSTRUCTIONS

CAUTION:

To reduce the risk of fire or injury to persons, read and follow these instructions.

1. Use only the battery(ies) specified.
2. Do not dispose of the battery(ies) in a fire. They may explode. Check with local waste management codes for special disposal instructions.
3. Do not open or mutilate the battery(ies). Released electrolyte is corrosive and may cause burns or injury to the eyes or skin. The electrolyte may be toxic if swallowed.
4. Exercise care in handling batteries in order not to short the battery to conductive materials such as rings, bracelets, and keys. The battery and/or conductor may overheat and cause burns.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR ANY TYPE OF MOISTURE.

FCC and Other Information

If requested by the telephone company, inform them as follows:

FCC Registration No.
(found on the bottom of the unit)

Ringer Equivalence 0.2B

The particular telephone lines to which the equipment is connected.

This unit must not be connected to a coin operated line.

If you are on a party line, check with your local telephone company.

Ringer Equivalence No. (REN):

The REN is useful in determining the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

In the event terminal equipment causes harm to the telephone network, the telephone company should notify the customer, if possible, that service may be stopped.

However, where prior notice is impractical, the company may temporarily cease service providing that they:

- (a) Promptly notify the customer.
- (b) Give the customer an opportunity to correct the problem with their equipment.

(c) Inform the customer of the right to bring a complaint to the Federal Communication Commission pursuant to procedures set out in FCC Rules and Regulations Subpart E of Part 68.

The Telephone Company may make changes in its communications facilities, equipment, operations or procedures, where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in FCC Part 68.

If such changes can be reasonably expected to render any customer terminal equipment incompatible with telephone company communications facilities, or require modification or alteration of such terminal equipment, or otherwise materially affect its use or performance, the customer shall be given adequate notice in writing, to allow the customer an opportunity to maintain uninterrupted service.

When programming emergency numbers and/or making test calls to emergency numbers:

1. Remain on the line and briefly explain to the dispatcher the reason for the call before hanging up.
2. Perform such activities in the off-peak hours, such as early morning hours or late evenings.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Privacy of communications may not be ensured when using this phone

CAUTION

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Some cordless telephones operate at frequencies that may cause interference to nearby TVs and VCRs. To minimize or prevent such interference, the base of the cordless telephone should not be placed near or on top of a TV or VCR. If interference is experienced, move the cordless telephone further away from the TV or VCR. This will often reduce or eliminate interference.

- **Environment**—do not place the unit in rooms where the temperature is less than 5°C (41°F) or greater than 40°C (104°F). Allow 10 cm (4") clearance around the unit for proper ventilation. Avoid excessive smoke, dust, mechanical vibration, shock, or direct sunlight.
- **Routine care**—wipe the unit with a soft cloth. Do not use benzine, thinner, or any abrasive powder. When you left the unit unused for long time, unplug the AC adaptor from the outlet.
- **If there is any trouble**—disconnect the unit from the telephone line and connect a known working phone. If the known working phone operates properly, have your unit repaired by one of the authorized Panasonic Factory Service Centers. If the known working phone does not operate properly, consult with your telephone company.

For product service

- Panasonic Servicenters are listed in the servicenter directory
- Call 1-800-545-2672 for the location of an authorized servicenter

When you ship the product

- Carefully pack your unit, preferably in the original carton
- Attach a letter, detailing the symptom, to the outside of the carton

Symptom

- Send the unit to an authorized servicenter, prepaid and adequately insured
- Do not send your unit to the Matsushita Consumer Electronics Company listed below or to executive or regional sales offices. These locations do not repair consumer products

- This cordless telephone is designed for use in the United States of America. Sale or use of this product in other countries may violate local laws.
- Ce téléphone sans fil est conçu pour être utilisé aux Etats-Unis d'Amérique. La vente ou l'emploi de cet appareil dans certains autres pays peut constituer une infraction à la législation locale.
- Este teléfono sin cordón fue elaborado para uso en los Estados Unidos de América. La venta o el empleo de este producto en ciertos países puede constituir violación de la legislación local.
- このコードレス電話機は、日本国外での使用を目的として設計されており、日本国内での使用は法律違反となります。従って、当社では日本国内においては原則として修理などのサービスは致しかねます。

**Matsushita Consumer Electronics Company,
Division of Matsushita Electric Corporation of America**
One Panasonic Way, Secaucus, New Jersey 07094

**Panasonic Sales Company ("PSC"),
Division of Matsushita Electric of Puerto Rico, Inc.**
Ave 65 de Infantería, Km 9.5, San Gabriel Industrial Park
Carolina, Puerto Rico 00985